

Rotavirus acceleration of type 1 diabetes in non-obese diabetic mice depends on type I interferon signalling

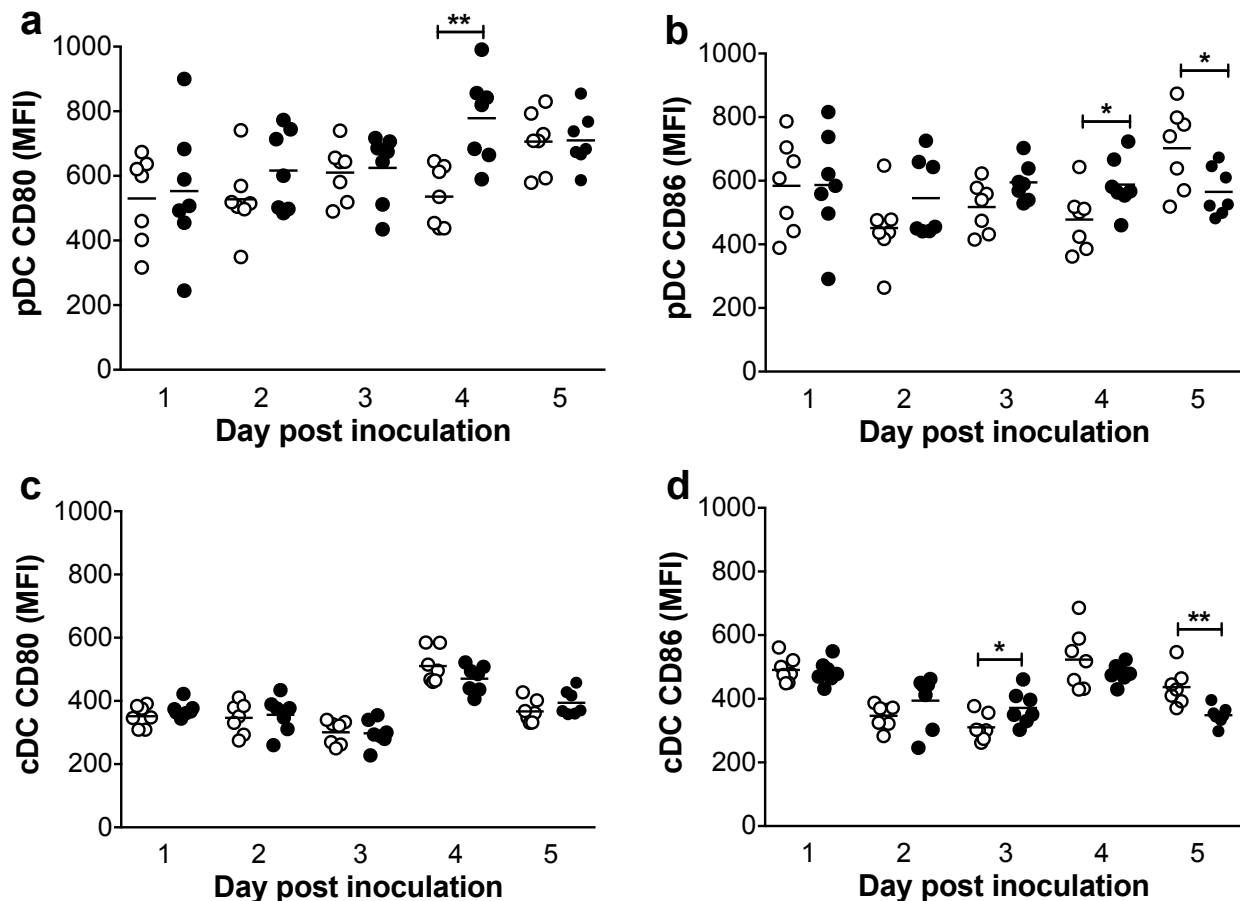
Supplementary Figures S1 to S10

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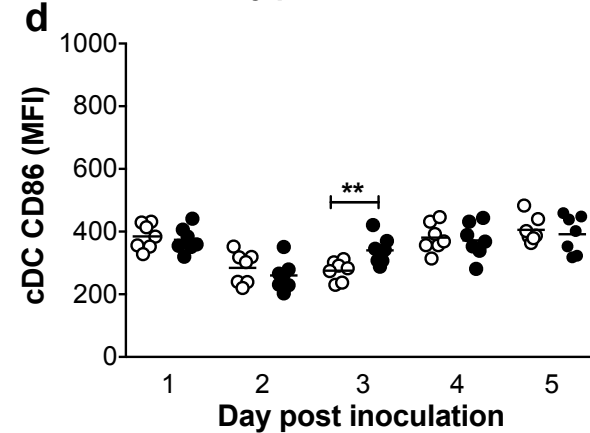
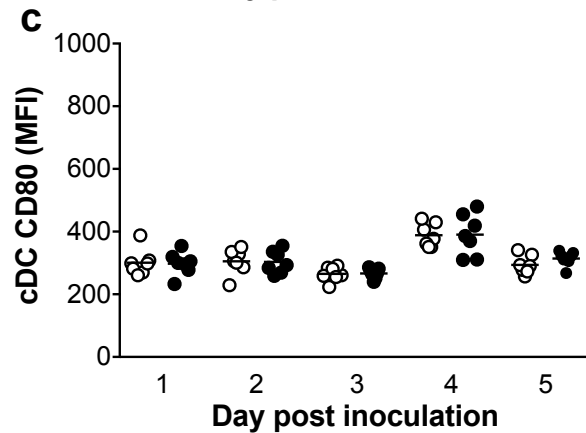
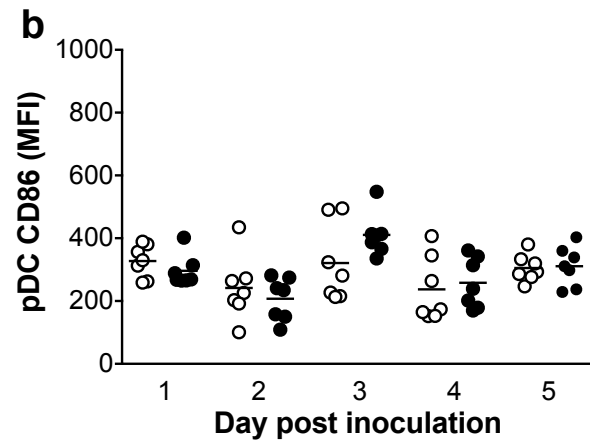
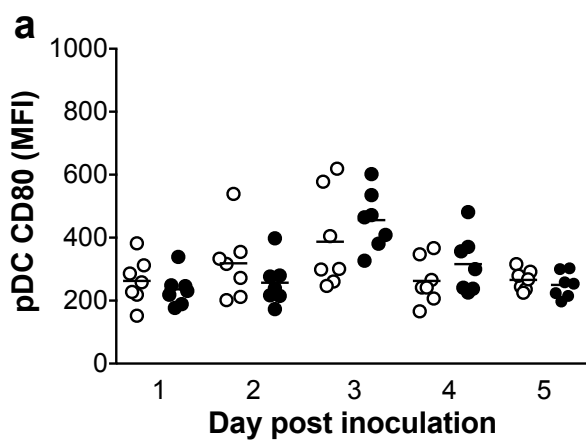
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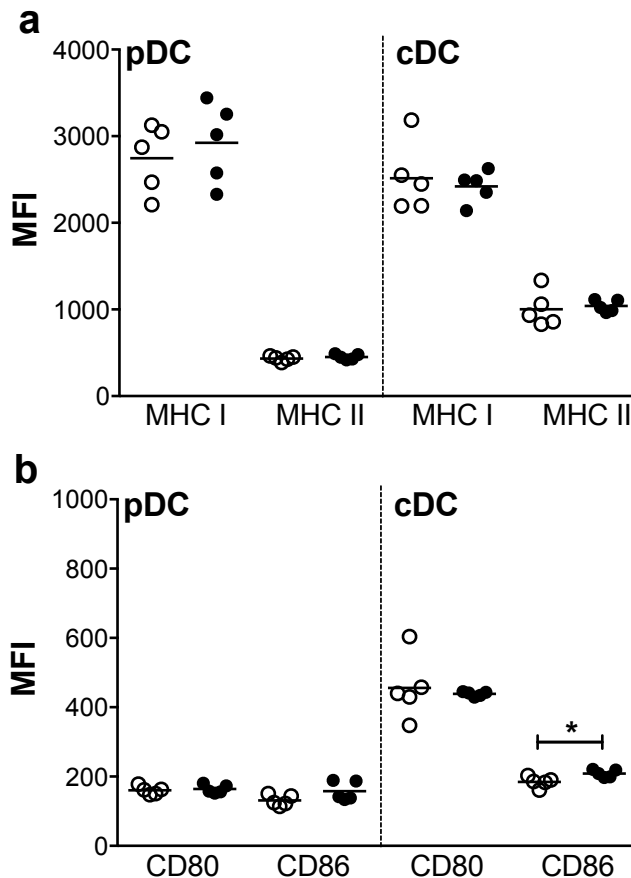
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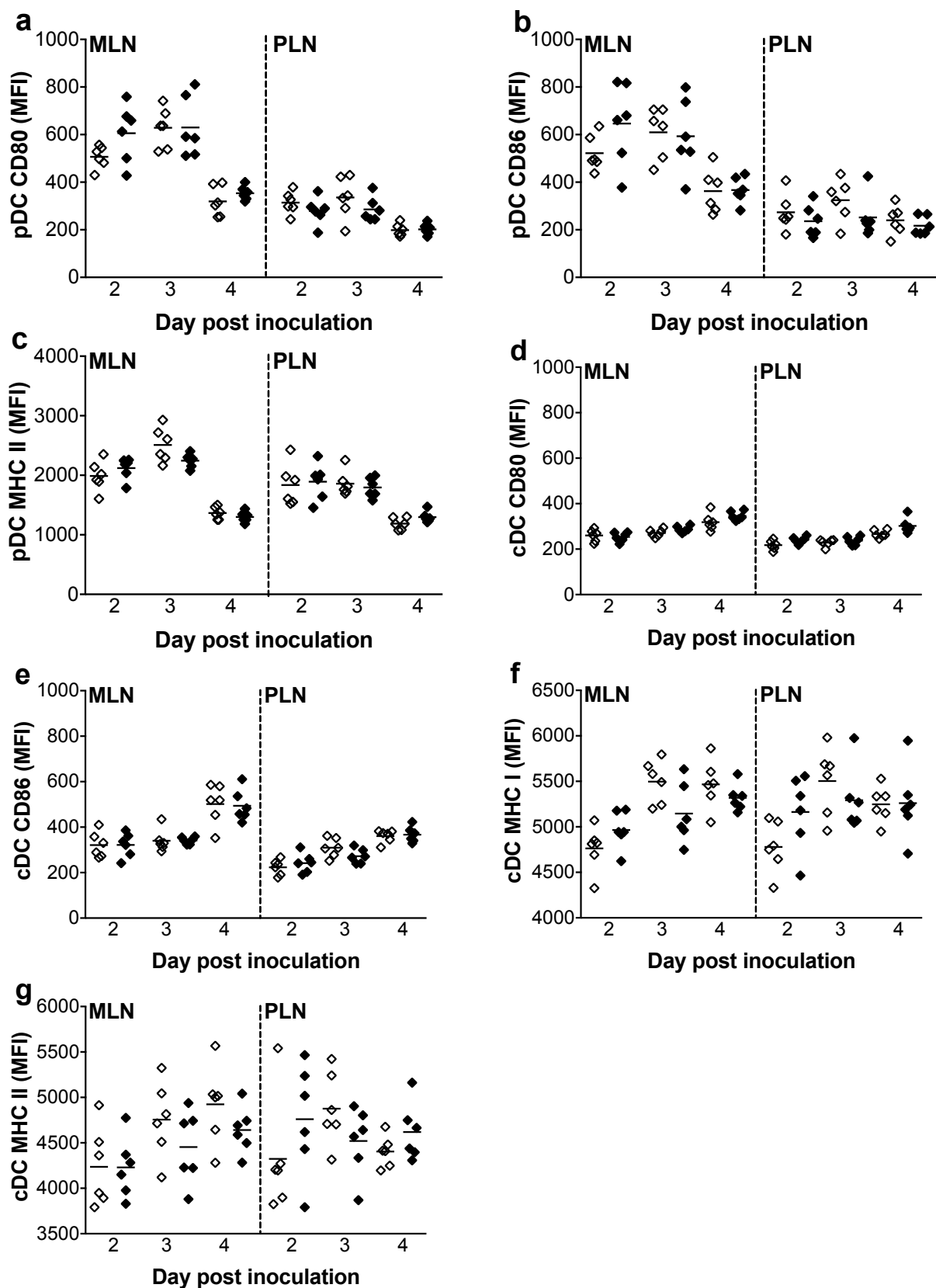
Supplementary Figure S1. Activation of pDC and cDC in MLN of RRV-infected NOD mice. Cells were isolated from females given mock inoculum (white circles) or RRV (black circles). The mean fluorescence intensity (MFI) of CD80 and CD86 on pDCs (**a**, **b**) and cDCs (**c**, **d**) was determined by flow cytometry. *p<0.05; ** p<0.01



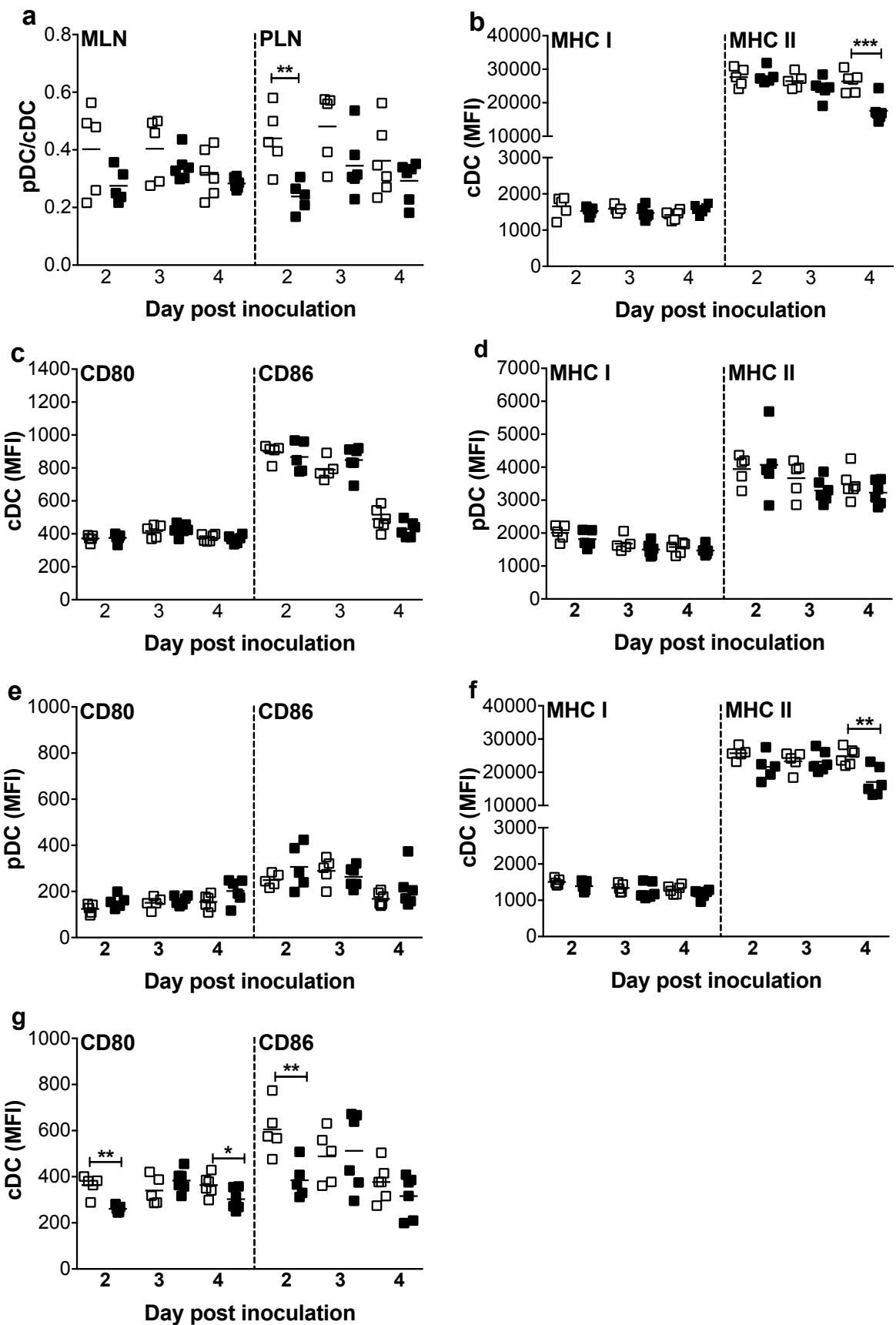
Supplementary Figure S2. Activation of pDC and cDC in PLN of RRV-infected NOD mice. Cells were isolated from females given mock inoculum (white circles) or RRV (black circles). The mean fluorescence intensity (MFI) of CD80 and CD86 on pDCs (**a**, **b**) and cDCs (**c**, **d**) was determined by flow cytometry. ** $p < 0.01$



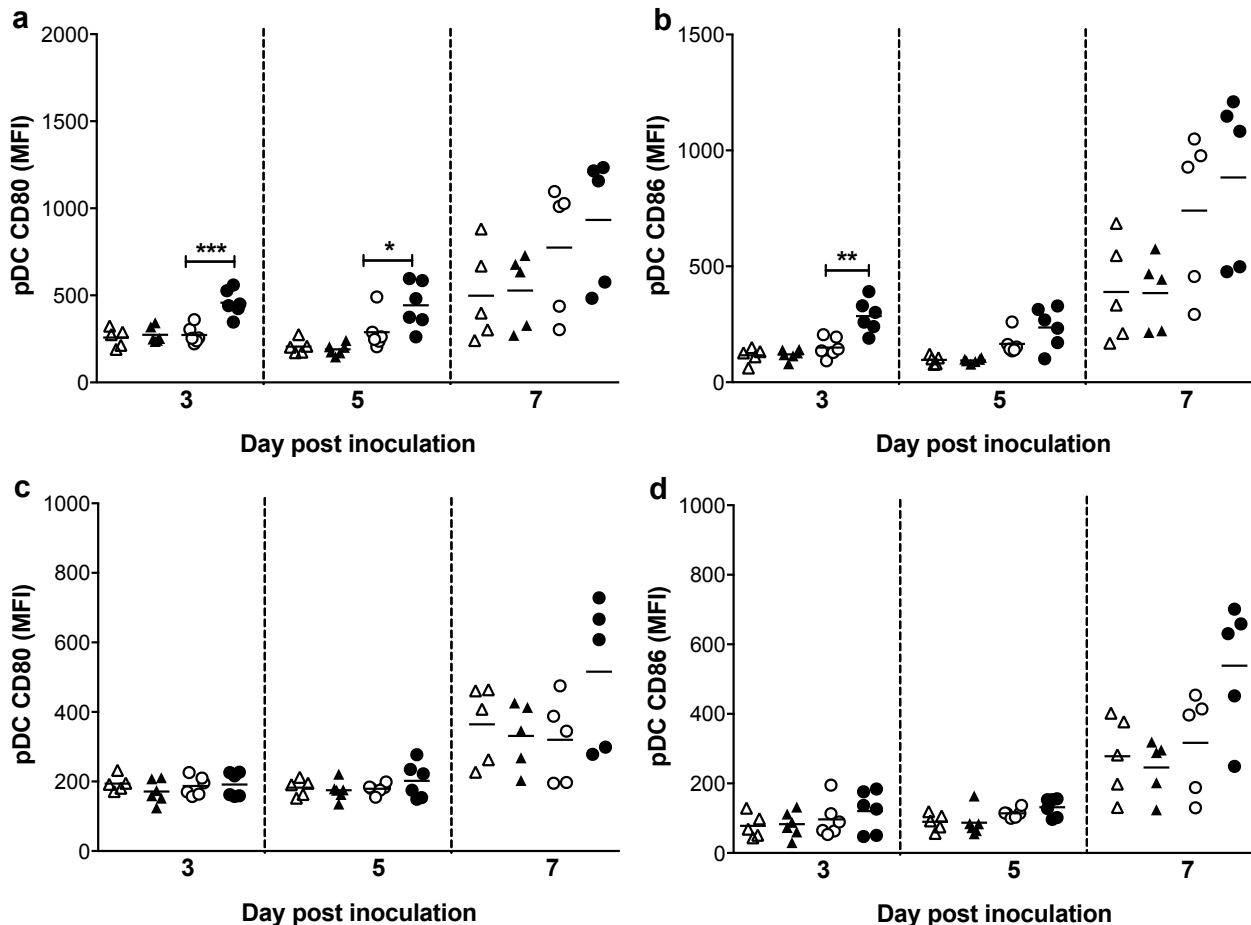
Supplementary Figure S3. Activation of pDC and cDC in the spleen of RRV-infected NOD mice. Cells were isolated from spleens of females given mock inoculum (white circles) or RRV (black circles) on day 3 post inoculation. The mean fluorescence intensity (MFI) of MHC I and MHC II (**a**) and CD80 and CD86 (**b**) on pDCs and cDCs in the spleen was determined by flow cytometry. * $p < 0.05$



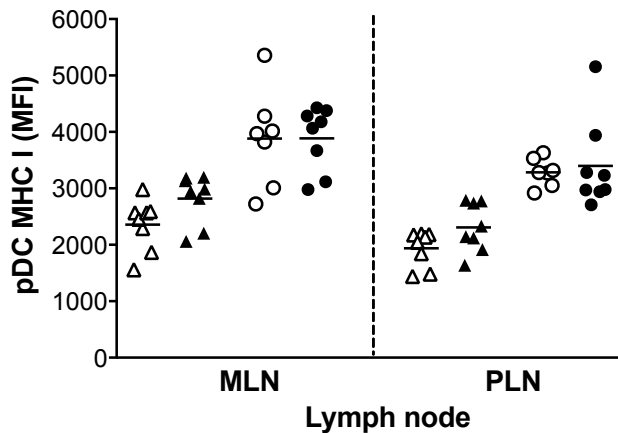
Supplementary Figure S4. Activation of pDC and cDC in MLN and PLN of CRW-8-infected NOD mice. Cells were isolated from females given mock inoculum (white diamonds) or CRW-8 (black diamonds). The mean fluorescence intensity (MFI) of CD80 (**a**), CD86 (**b**) and MHC II (**c**) on pDCs, and CD80 (**d**), CD86 (**e**), MHC I (**f**) and MHC II (**g**) on cDCs in the lymph nodes was determined by flow cytometry.



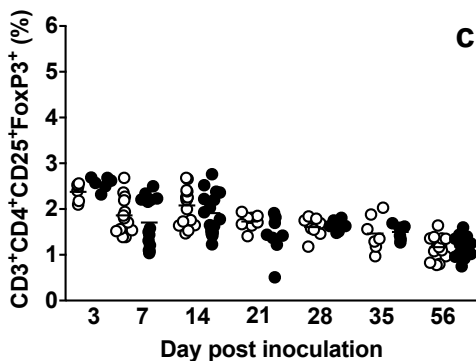
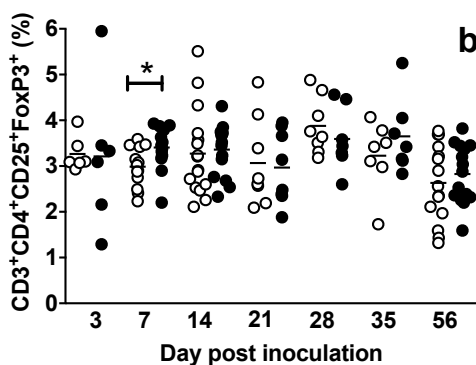
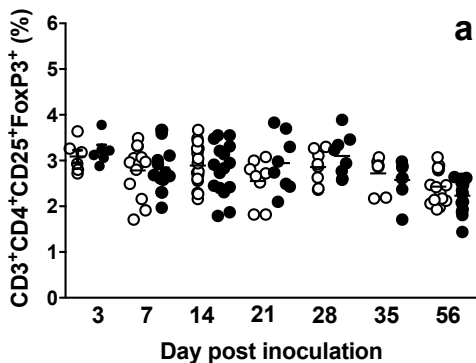
Supplementary Figure S5. Activation of pDC and cDC in MLN and PLN of RRV-infected C57BL/6 mice. Cells were isolated from females given mock inoculum (white squares) or RRV (black squares). **(a)** The pDC/cDC ratio for each mouse. The mean fluorescence intensity (MFI) of MHC I and MHC II **(b)** and CD80 and CD86 **(c)** on cDCs in the MLN was determined by flow cytometry. The expression of MHC I and MHC II **(d)** and CD80 and CD86 **(e)** on pDCs in PLN, and of MHC I and MHC II **(f)** and CD80 and CD86 **(g)** on cDCs in the PLN was similarly determined. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$



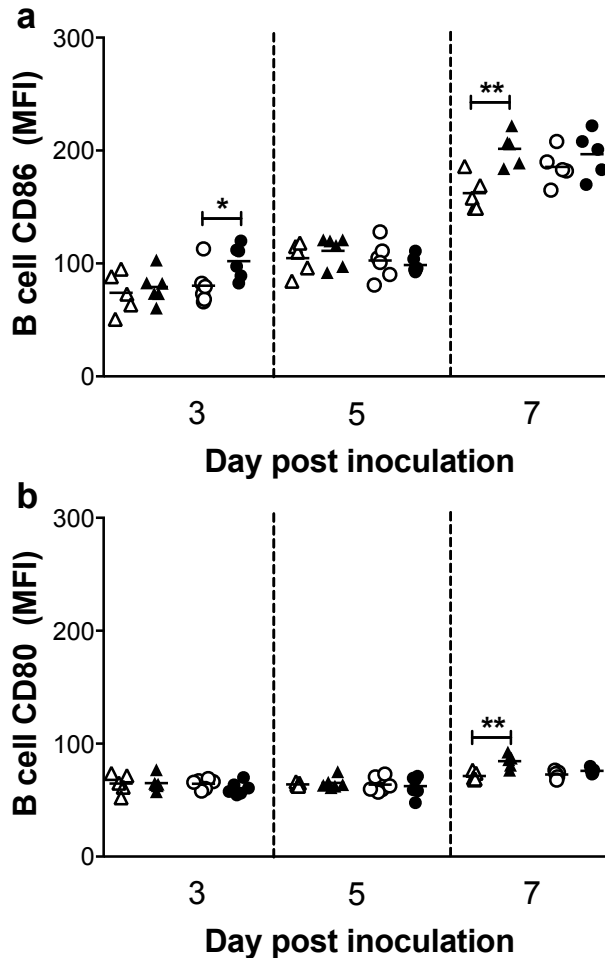
Supplementary Figure S6. CD80 and CD86 expression on pDC in MLN of NOD.IFNAR1^{-/-} mice. The mean fluorescence intensity (MFI) of CD80 and CD86 on pDCs in the MLN (**a, b**) and PLN (**c, d**) of mock- (white triangles) or RRV-inoculated (black triangles) NOD.IFNAR1^{-/-} mice and mock- (white circles) or RRV-inoculated (black circles) NOD mice is shown. *p<0.05; **p<0.01; ***p<0.001



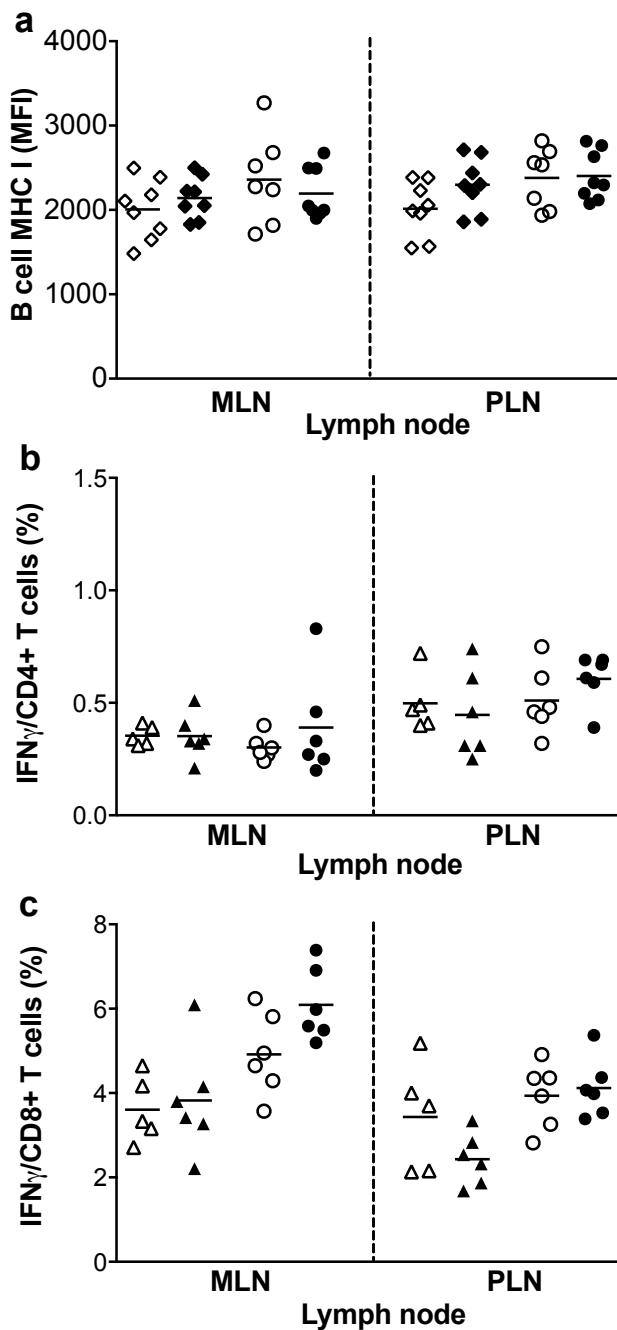
Supplementary Figure S7. Lack of activation of pDC in lymph nodes of RRV-infected NOD.*IFNAR1*^{-/-} and NOD mice at day 14 post inoculation. Mean fluorescence intensity (MFI) of MHC I on pDCs from the MLN and PLN of mock- (white triangles) or RRV-inoculated (black triangles) NOD.*IFNAR1*^{-/-} mice and mock- (white circles) or RRV-inoculated (black circles) NOD mice.



Supplementary Figure S8. **Proportions of regulatory T cells in RRV-infected NOD mice.** The regulatory T cell population (CD3⁺CD4⁺CD25⁺FoxP3⁺) was detected by flow cytometry in cells isolated from (a) MLN, (b) PLN and (c) spleen of groups of adult females given mock inoculum (white circles) or RRV (black circles). * p < 0.05



Supplementary Figure S9. Effect of RRV infection on CD80 and CD86 expression by B cells in NOD.IFNAR1^{-/-} mice. Mean fluorescence intensity (MFI) of CD80 (a) and CD86 (b) on B cells in the MLN of mock- (white triangles) or RRV-inoculated (black triangles) NOD.IFNAR1^{-/-} mice and mock- (white circles) or RRV-inoculated (black circles) NOD mice. *p<0.05; ** p<0.01



Supplementary Figure S10. Lack of lymphocyte activation in lymph nodes of RRV-infected NOD.*IFNAR1*^{-/-} and NOD mice at days 3 and 14 post infection. (a) Mean fluorescence intensity (MFI) of MHC I on B cells of mock- (white triangles) or RRV-inoculated (black triangles) NOD.*IFNAR1*^{-/-} mice and mock- (white circles) or RRV-inoculated (black circles) NOD mice on day 14 post inoculation. The CD4⁺ T cell **(b)** and CD8⁺ T cell **(c)** proportions expressing interferon (IFN) γ in the MLN and PLN at day 3 post inoculation in these mouse groups also are shown.